# Don't Just Filter... **Purify** with Our Low Temperature Catalyst to Remove CO



#### There is nothing else like it!

MST's unique LT CAT™ low temperature catalyst offers significant benefits over all other CO removal systems. Because we use a precious metal catalyst, our Respiratory Protector® Series Breathing Air Purification Systems convert CO to carbon dioxide without the limitations you find with every other CO removal system on the market today:

No expensive desiccant dryers

w Temperature

With our LT CAT catalyst, you don't need dryers. Other systems require very dry air to function (4% relative humidity). To get air this dry costs a lot of money, primarily for desiccant drying towers.

When you factor in the cost of buying, operating

and maintaining a dryer, clean air for your workers can

become very expensive.

drying time to remo

### Continuous operation

Our Respiratory Protector Systems are designed to operate continuously. All other CO removal systems require drying time to remove moisture from saturated dryers. Continuous operation is possible with other companies' equipment, but they require "twin towers," to alternate operation while moisture is purged...more equipment,

more complexity, more cost!

#### **Greater operator comfort**

The ultra-dry air from all competitive systems is very uncomfortable for breathing! Respiratory Protector Systems provide comfortably humid air for operators, avoiding overly-dry nasal passages and discomfort.

Removes CO and other toxic gases including: ozone, nitric oxide, sulfur dioxide, nitrogen dioxide, hydrogen sulfide, ammonia, acetaldehyde, methyl chloride, methyl ethyl ketone, acetone and methyl alcohol.

Lowest installed cost of any CO removal system (50%+ savings)

#### **Greater portability**

At only 19 or 31 lbs., our portable Respiratory Protector systems are easy to get to the jobsite.

#### **Unique air distribution baffles**

Maximize absorption and catalytic efficiency.

#### **Total costs are much lower**

By eliminating dryers, our unique design removes more than half of the cost for most systems compared to other CO removal equipment, making CO removal affordable for any operation.

The difference is the catalyst!

1st

Pre-filter provides particulate removal

Stage

2nd

Coalescing action for liquid contaminates

Stage

3rd

Contains activated charcoal for removal of gaseous hydrocarbons, tastes, and odors.

Stage

4th

Contains unique low temperature catalyst for removal of carbon monoxide and other toxic gases.

## Stage

#### WARNING

MST's Air Purification Systems will not increase the oxygen content of an air supply and should not be used when air entering the system is oxygen deficient.

## Respiratory Protector® Portable CO Removal Systems



Model RP010AMST

APPROVED LR 104195
(Note: 5700 monitor approved for Class 1, Div. I, Groups A, B, C & D Hazardous Locations when utilizing only 9 volt batteries.)

hese are the only truly portable,

continuous-use CO removal systems available! Operators enjoy extra freedom while breathing cleaner, humidified air.

In addition to weighing a mere 19 or 31 lbs., these Respiratory Protector systems come complete with CO monitor standard on all models. You can choose between the Model 5701 CO and oxygen monitor or the Model 5700 monitor with LCD display of CO in ppm.

Accessory Port/Indicator Panel

Specifications	Model RP010	Model RP050
Rated Air Flow (Max.) @ 100 PSI	10 SCFM (4.7 L/s)	50 SCFM (23.6 L/s)
Operating Pressure	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)
Inlet Pressure (Max.)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)
Outlet Pressure Range	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)
Operating Temp. Range	68-150°F (20-65°C)	68-150°F (20-65°C)
Operating Relative Humidity (Inlet Air - Non Condensing)	30-100% RH	30-100% RH
Outside Dimensions	13.5"L x 12.87"W x 6"D (343mm x 327mm x 153mm)	23.25"L x 20.75"W x 9"D (590mm x 527mm x 229mm)
Weight (Including Monitor)	19 lbs. (8.6 kg.)	31 lbs. (14.1 kg.)
Replacement Filter Set	RCRP010	FX050

- 1 Inlet connection for supplied air source
- 2 Pressure relief valve for added safety
- 3 Pre-filter provides first-stage particulate removal
- 4 Second-stage coalescing action of liquid contaminates
- 5 Automatic float drain expels liquid contaminates out of system
- 6 Third-stage contains activated charcoal for removal of gaseous hydrocarbons, tastes and odors
- 7 Fourth-stage contains unique lowtemperature catalyst for removal of carbon monoxide and other toxic fumes. CO is converted to carbon dioxide.
- 8 Pressure regulator with indicating gauge for adjusting the correct pressure to operator's supplied air respirator system
- 9 Quick disconnects included for easy connection to supplied air respirator system
- 10 Carbon monoxide monitor; standard on all models
- 11 Accessory port/indicator panel (see inset, left)



